

Michigan



— Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

For a copy of the Michigan 1998 305(b) report, contact:

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The report is also available on the Internet at: <http://www.deq.state.mi.us/swq/gleas/gleas.htm>

Surface Water Quality

Ninety-seven percent of Michigan's assessed river miles fully support aquatic life uses. Swimming use is also fully supported in 98% of the assessed rivers and over 99% of the assessed lake acres. Priority organic chemicals (in fish) are the major cause of nonsupport in more river miles than any other pollutant, followed by siltation and sedimentation, metals, and pathogens. Leading sources of pollution in Michigan include unspecified nonpoint sources, combined sewers, agriculture, contaminated sediments, municipal and industrial discharges, and urban runoff.

Water quality in Michigan's inland lakes is generally good to excellent, with a number of outstanding lakes. While almost all lakes support swimming, a generic fish consumption advisory is applied to all inland lakes due to widespread mercury contamination. Accelerated eutrophication (overenrichment) is also a concern in Michigan's lakes. Nutrient sources associated with human activities such as sewage, fertilizers, detergents, and surface runoff result in nuisance plant and algal growth.

Four of the five Great Lakes border Michigan. The open waters of Lakes Superior, Michigan, and Huron have good quality. Poor water quality is restricted to a few degraded locations near shore. Lake Erie's water quality has improved dramatically in the last two decades, due to pollutant discharge reductions for nutrients, metals, and oils. Water quality in Lake Huron has also improved due to water quality improvements in Saginaw Bay.

Ground Water Quality

Most of the ground water resource is of excellent quality, but certain aquifers have been contaminated with toxic materials leaking from waste disposal sites, businesses, or government facilities. The Michigan Ground Water Protection Strategy and Implementation Plan identifies specific program initiatives, schedules, and agency responsibilities for protecting the state's ground water resources.

Programs to Restore Water Quality

Major point source reductions in phosphorus and organic material

loads have reduced or eliminated water quality problems in many Michigan waters. However, expanded efforts are needed to control nonpoint source pollution, eliminate combined sewer overflows, and reduce toxic contamination. Michigan has implemented an industrial pretreatment program, promulgated rules on the discharge of toxic substances, and regulated hazardous waste disposal facilities, but many toxicity problems are due to past activities that contaminated sediments and atmospheric loadings.

Programs to Assess Water Quality

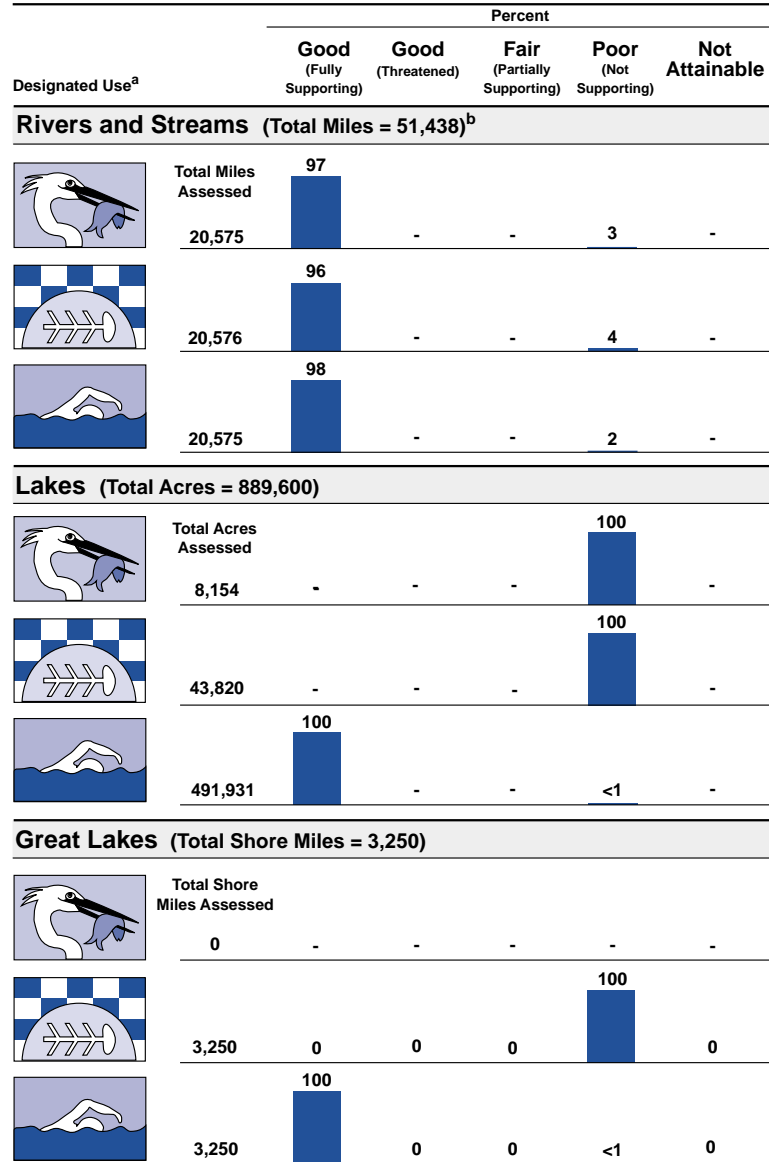
Michigan employs a 5-year watershed monitoring program cycle to track whether waters of the state meet water quality standards. Each year the state focuses on 9 to 19 of the 61 major watersheds in Michigan. The state's surface water monitoring strategy was recently updated, and additional funding of \$500,000 per year was provided to bolster both "local" and state monitoring efforts. The enhanced program consists of eight interrelated monitoring elements: fish contaminants, water chemistry, sediment chemistry, biological integrity, physical habitat, wildlife contaminants, inland lake quality and eutrophication, and stream flow.

– Not reported in a quantifiable format or unknown.

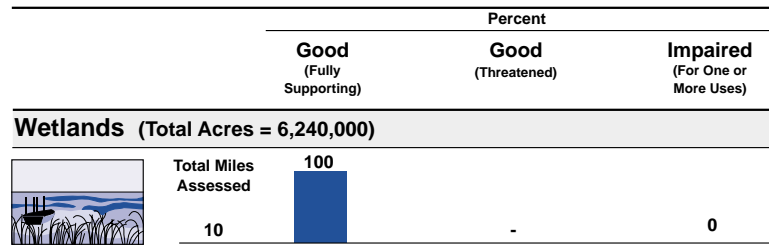
^a A subset of Michigan's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

^b Includes nonperennial streams that dry up and do not flow all year.

Individual Use Support in Michigan



Summary of Use Support in Michigan



Note: Figures may not add to 100% due to rounding.